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09/829,584	04/09/2001	Steven V. Kauffman	SVL920010023US1	7961

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EXAMINER

BASOM, BLAINE T

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,584

Applicant(s)

KAUFFMAN ET AL.

Examiner

Blaine Basom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-97 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/8/2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicants' amendments to independent claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, and 78, as well as the addition of new claims 86-97. Regarding each of the independent claims, the Applicants assert that Loveman (U.S. Patent No. 6,211,869 to Loveman et al.) and Clarin (U.S. Patent No. 6,414,725 to Clarin et al.), which are described in the previous Office Action, are not combinable to teach an edit station comprising a browser to select portions of lower resolution content, a feature expressed in each of the independent claims. The Applicants particularly argue that Clarin fails to disclose a browser capable of use within the Loveman system, and fails to disclose the requisite motivation to modify Loveman to use such a browser. The Examiner respectfully disagrees with this argument. Like Loveman, which discloses an editing system using particular fat client software for browsing and editing low resolution video content available on a web-based server (for example, see column 17, line 43 – column 18, line 60 of Loveman), Clarin describes fat client software providing many different editing functions for browsing and editing video content available on a web-based server (see column 4, lines 24-58). It is consequently understood that the software of Clarin is analogous to, and capable of, performing all of the functions required by the software of Loveman, such as storyboard creation (for example, see column 18, lines 47-55 of Loveman, and column 4, lines 40-58 of Clarin). Additionally, Clarin teaches separating the browsing and editing functions into distinct programs, and using a readily-available browser program for performing the browsing functions. Clarin explicitly discloses that such browsers are inexpensive and provide a familiar and easy to use interface (see column 4, lines 24-39). It is consequently understood that it would

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have been obvious to use the browser of Clarin in the edit station of Loveman; such browsers, being readily available, would reduce development and maintenance costs for the edit station software, and provide a familiar and easy to use user interface. Therefore, the Examiner maintains that Clarin discloses a browser capable of performing all of the browsing functions required by the software of Loveman, and maintains that Clarin suggests that such a browser would be an improvement over the software of Loveman.

Further regarding each of the independent claims, the Applicants assert that Loveman and Clarin fail to teach storing lower resolution content in a fast access storage and higher resolution content in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage, as has been added to each of the independent claims. The Examiner respectfully disagrees. As is shown below, particularly in the rejections for independent claims 1, 22, 24, 26, 47, 49, 51, 72, 74, 76, 77, and 78, Loveman in fact teaches such a concept.

The Applicants' arguments filed 7/20/2004 have thus been fully considered, but are not persuasive.

Claim Objections

Claim 22 is objected to because of the following informalities: In claim 22 the phrase, "storage storing content in a low resolution format a fast access storage" is grammatically incorrect. Additionally in claim 22 the phrase, "more quickly that the high capacity storage" is considered grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-29, 31-54, and 56-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,211,869, which is attributed to Loveman et al. (and hereafter referred to as “Loveman”), and also over U.S. Patent No. 6,414,725, which is attributed to Clarin et al. (and hereafter referred to as “Clarin”). In general, Loveman describes a “digital multimedia system,” which is used by journalists and editors to create news stories that are comprised of video, text, and graphics (for example, see column 4, lines 28-39). Such a digital multimedia system is therefore considered a “content production system” like that of the claimed invention.

Specifically regarding claims 1 and 76, Loveman discloses that the above-described digital multimedia system comprises a “multimedia capture and encoding system” which receives content in an initial format and reformats the received content into a first version having a first format and a second version having a second format, wherein the second version has a higher resolution than the first version (see column 4, lines 28-46; column 13, lines 14-20; and column 14, lines 13-22). This multimedia capture and encoding system is consequently considered an “ingest system” like that described in the claimed invention. Furthermore, Loveman discloses that the two versions of the multimedia content are stored in a “multimedia storage system” (see column 4, lines 47-55). The lower resolution content may particularly be

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stored in a “multimedia archive system” (see column 17, lines 14-22; and column 15, lines 30-59), and the higher resolution content may be stored in a “media server” (see column 20, lines 19-39; and column 12, line 49 – column 13, line 14). Loveman discloses that the media server is a high-capacity server, comprising the ability to maintain the higher resolution content in near-line and off-line storage, such as on tape or optical disks (see column 12, line 49 – column 13, line 14). Additionally, Loveman discloses that the multimedia archive system, which is part of a “core newsroom system,” may be accessed through a faster network than the media server, which is part of a “video production system” (for example, see column 12, lines 18-34). Because of these different network speeds, because tape storage requires a relatively large access time, and because the higher resolution content requires more bandwidth than the lower resolution content (for example, see column 7, lines 53-54), it is understood that the content stored on the multimedia archive is accessed more quickly than the content stored on the media server.

Loveman thus discloses storage for storing the lower resolution content in a fast access storage, specifically a multimedia archive, and storage for storing the higher resolution content in a high capacity storage, specifically a media server, whereby the fast access storage is accessible more quickly than the high capacity storage. Additionally, Loveman discloses that the digital multimedia system also comprises a “video editing and playback system,” which is used to generate a composition using a selected portion of the first version of the content, and retrieve and play back the composition using the corresponding portion of the second version of the content (see column 4, line 56 – column 5, line 4). Such a video editing and playback system is consequently understood to comprise an “edit station” and a “retrieval apparatus,” like those recited in the claimed invention, wherein the edit station is used for selecting a portion of content

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from the lower resolution version, and the retrieval apparatus is used for receiving from the edit station a description of this selected portion and retrieving the portion of the higher resolution content corresponding to this selected portion. Specifically regarding this edit station, Loveman discloses that it is connected to the multimedia storage system via a network, by which it accesses the multimedia storage system to “browse” and select a portion of the lower resolution content (for example, see column 5, lines 5-62; column 7, lines 1-37; and column 17, lines 43-64). Loveman, however, does not explicitly disclose that the edit station comprises a browser to selection portions of the lower resolution content, as is expressed in claims 1 and 76.

Like Loveman, Clarin describes a system for receiving content in an initial format, and for reformatting the content into content having a first format and content having a second format, wherein the second format has a higher resolution than the first format (see column 2, line 60 – column 4, line 24). Clarin additionally describes an edit station for selecting and specifying a portion of the low resolution content, which like that of Loveman, is stored remotely over a network (see column 4, lines 40-64). Specifically regarding the claimed invention, Clarin teaches that such an edit station may implement a browser to select a portion of the low-resolution content (see column 4, lines 25-39).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Loveman and Clarin before him at the time the invention was made, to modify the edit station taught by Loveman, such that it includes the browser of Clarin for searching and selecting portions of lower resolution content. It would have been advantageous to one of ordinary skill to utilize this combination, because such browsers are inexpensive, readily

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available, and provide a familiar graphical user interface, as is taught by Clarin (see column 4, lines 25-39).

Concerning claims 26, 51, 77, and 78, the above-described digital multimedia system of Loveman and Clarin is understood to necessitate software and teach a method for: receiving content in an initial format and reformatting the received content into content having a first format and content having a second format, wherein the second format has higher resolution than the first format; storing the lower resolution content in a fast access storage and the higher resolution content in a high capacity storage, wherein the fast access storage is accessible more quickly than the high capacity storage; selecting a portion of content from the lower resolution content using a browser; and, receiving a description of the selected portion and retrieving a portion of content from the higher resolution content corresponding to the selected portion. Such a method is considered a method like that of claims 26 and 77, which is for producing content, and such software is considered a program product, like that recited in claims 51 and 78.

Regarding claims 2-3, 27-28, and 52-53, Loveman discloses that the above-described first version of the reformatted multimedia content is a low resolution version, and that the above-described second version of the reformatted multimedia content is a high resolution version (for example, see column 4, lines 28-39). Moreover, Loveman discloses that each version comprises digitized video content (see column 14, lines 13-22; and column 13, lines 14-37). It is therefore understood that the first version comprises low-resolution digitized video content, and that the second version comprises high resolution digitized video content.

As per claims 4, 29, and 54, Loveman discloses that the above-described first version of the reformatted multimedia content may be an MPEG-1 encoded stream (see column 5, line 63 –

column 6, line 19). Thus the first version is considered to comprise "MPEG1," as is expressed in each of claims 4, 29, and 54.

With respect to claims 6-7, 31-32, and 56-57, Loveman discloses that the above-described multimedia capture and encoding system is connected to a network, which is used for transmitting data (see column 5, lines 19-34; column 14, lines 13-22; and column 13, lines 14-20). This multimedia capture and encoding system, which is considered an ingest system as described above, is therefore understood to be "web-based" like recited in claims 6, 31, and 56. Moreover, Loveman discloses that the above-described video editing and playback system is connected to a network, which is used for sending and receiving data (see column 5, lines 19-34; column 5, lines 50-62; and column 16, line 64 – column 17, line 11). Therefore, this video editing and playback system, which is understood to comprise an edit station as is described above, is considered "web-based" as recited in claim 7. Since the ingest system and edit station are both web based, the method taught by Loveman and Clarin, which comprises these systems, is also considered web based as recited in claims 32 and 57.

In reference to claims 8-9, 33-34, and 58-59, Loveman discloses that the above-described first version of the multimedia content, which is of lower resolution than the second version, is stored in fast access storage during editing. Specifically, the version is stored in disk storage (for example, see column 8, lines 18-40).

In regard to claims 10, 35, and 60, Loveman discloses that the above-described second version of the multimedia content, which is of higher resolution than the first version, may be stored on tape storage (for example, see column 12, lines 49-60).

Referring to claims 11, 36, and 61, the multimedia capture and encoding system disclosed by Loveman receives content in an initial format and reformats the received content into a first version having a first format and a second version having a second format, wherein the second version has a higher resolution than the first version, as is described above. Loveman particularly discloses that this multimedia capture and encoding system comprises a “media recorder” (see column 14, lines 13-22), which receives the multimedia content in its initial format, and *digitizes* and compresses the content into the first and second versions (see column 13, lines 14-37). Since the initial format is *digitized*, or in other words, converted from an analog to a digital format, it is understood that the initial format prior to this digitization is analog.

Concerning claims 12-13, 37-38, and 62-63, Loveman discloses that metadata may be added to the stored multimedia content (see column 19, lines 21-63). It is therefore understood that the digital multimedia system of Loveman comprises an apparatus for adding metadata to the stored content. Specifically regarding claims 13 and 38, Loveman discloses that such metadata may comprise “user defined elements,” or in other words, user input (see column 19, lines 48-56).

In regard to claims 14-16, 39-41, and 64-66, Loveman discloses that timecodes identifying corresponding portions of the above-described first and second versions are stored with the first and second versions, respectively (see column 20, lines 19-39). The timecodes associated with the selected portion of the first version, i.e. lower resolution version, are used to retrieve the corresponding portion of the second version, i.e. higher resolution version (see column 20, lines 19-39). Moreover, Loveman presents a graphical user interface used to create compositions of the multimedia data, wherein the timecodes associated with the first version are

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superimposed on images of the first version (see column 18, lines 11-25; and reference number 516 in figure 11).

In reference to claims 17-21, 42-46, and 67-71, the video editing and playback system of Loveman and Clarin is understood to comprise an edit station, which is used to select a portion of content from the low resolution version of the multimedia content, as is described above. Loveman particularly discloses that such an edit station comprises software for searching the lower resolution content based on user specified criteria (see column 17, lines 44-64). Moreover, Loveman discloses that the edit station provides an interface for viewing the lower resolution content and selecting portions therefrom (see column 18, lines 47-55). Also provided by the user interface of the edit station is a "storyboard window," which allows users to create a sequence of selected video clips in order to produce a news story (see column 18, lines 47-55). As this storyboard window allows clips to be laid out in sequence, according to the user's desire, it is interpreted that the sequence can be modified until the user is satisfied with the sequence. Thus the edit station of Loveman is understood to further comprise software for creating a list of selected portions of the lower resolution content, whereby this list may be modified. Lastly, Loveman discloses that this list may be provided to the above-described retrieval apparatus, i.e. "video editor," which retrieves and displays clips of higher resolution content corresponding to the list (see column 18, line 56 – column 19, line 20). Thus the description sent to the retrieval apparatus comprises this list.

In regard to claims 22, 47, 49, 72, and 74, Loveman and Clarin present a content editing system, method, and program product wherein multimedia content is reformatted into a first and second version having different resolutions, wherein the lower resolution version is stored in a

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fast access storage, and the higher resolution version is stored in a high capacity storage, and wherein the fast access storage is accessible more quickly than the high capacity storage, as is described above. In particular, the first version, i.e. the low-resolution version, may be stored in a first server, (see column 5, lines 44-49; and column 6, lines 20-49 of Loveman), namely a “multimedia archive” (see column 15, lines 30-59 of Loveman). This low resolution content may be accessed, viewed, and selected on an edit station using a browser, as is described above. Specifically, the multimedia archive server provides the low resolution content to a content editing application implemented on a journalist workstation, whereby selected portions of the content may be viewed and edited (see column 16, line 64 – column 17, line 11; and column 17, line 44 – column 18, line 60 of Loveman). Thus the server of the multimedia archive is considered to host a content-editing application enabling access, viewing, and selection of portions of the low-resolution content. Moreover, Loveman discloses that a plurality of such journalist workstations may be in communication with the multimedia archive server (see column 14, lines 35-45), each workstation implementing the content-editing application to search, view, and select portions of the low resolution content and from the selected portions, create an edit list for use in retrieving corresponding portions of the high resolution content (see column 16, line 64 – column 17, line 11; and column 17, line 44 – column 19, line 20). Clarin complements the teachings of Loveman, and particularly teaches that such a journalist workstation may implement a browser to select portions of the low resolution content, as is described above. Thus the content editing system of Loveman and Clarin comprises a plurality of clients in communication with the server, each client enabled to run the content-editing application to search, view, and select portions of the low resolution content using a browser, and

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from the selected portions, create an edit list for use in retrieving corresponding portions of the high resolution content.

As per claim 24, the multimedia archive server of Loveman and Clarin, which is described in the previous paragraph, is understood to necessitate software for enabling access, viewing, and selection of portions of the low resolution content from a file stored in a fast access storage accessible to the server. Moreover, each of the journalist workstations, which are described in the previous paragraph, are understood to necessitate client software for searching, viewing, and selecting portions of the low resolution content using a browser, and from the selected portions, creating an edit list, i.e. story board for use in retrieving corresponding high resolution content in a high capacity storage accessible to the server, wherein the fast access storage is accessible more quickly than the high capacity storage. This server software and client software is considered to constitute a “content editing software application,” like that of claim 24.

With respect to claims 23, 25, 48, 50, 73, and 75, Loveman discloses that the above-described edit list is sharable with other journalist workstations, i.e. clients, through the multimedia archive server (see column 18, lines 47-60).

With respect to claims 79-81, Loveman describes a verification process to determine the correspondence between the above-described first version of the multimedia content, and the above-described second version of the multimedia content (for example, see column 6, lines 31-67). This verification is particularly done by a “capture manager,” which is part of the above-described ingest system of Loveman (see column 5, lines 35-43, and column 6, lines 31-67). Consequently, it is understood that the above-described system of Loveman and Clarin, which

comprises such a capture manager, performs the verification process described in each of claims 79-81.

Concerning claims 82-84, Clarin teaches that for an encoded multimedia data stream to be displayed to the user, the encoded data must be converted into an audio and video format (see column 4, lines 24-39). Consequently, it is understood that the playback system, i.e. retrieval apparatus described by Loveman, which is used for retrieving and displaying a portion of encoded, high-resolution multimedia content for final editing (for example, see column 4, line 56 – column 5, line 4; and column 7, lines 1-23), inherently converts the encoded content into a third format, specifically an audio and video format, such that the multimedia content can be viewed for final editing.

Regarding claim 85, both Loveman and Clarin disclose that a server hosting a content-editing application also enables access and viewing of the low-resolution content (for example, see column 8, line 18 – column 9, line 8; and column 17, lines 43-64 of Loveman; and column 4, lines 25-39 of Clarin). Additionally, both Loveman and Clarin disclose that each of a plurality of clients is enabled to run the content-editing application to search and view the low-resolution content (for example, see column 7, lines 38-52 of Loveman; and column 4, lines 10-39 of Clarin).

With respect to claims 86-97, Loveman discloses that the multimedia archive, which as described above is considered a fast access storage, comprises a “library server” used to catalog and retrieve low resolution content (see column 15, lines 30-59). Additionally, Loveman discloses that the low resolution content may be transmitted from the server via a stream, that it may be displayed at the user’s computer as it is delivered (for example, see column 9, lines 9-

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35). Clarin similarly teaches streaming low resolution content from a server (see column 4, lines 24-39). Consequently, the above-described multimedia archive of Loveman and Clarin is considered digital library with media streaming capability.

Claims 5, 30, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Loveman and Clarin, which is described above, and also over the "VideoUniversity.com" website (which is hereafter referred to as "VideoUniversity"). As shown above, Loveman and Clarin present a system and method like that recited in claims 1, 26, and 51. Loveman particularly describes a multimedia capture and encoding system, i.e. ingest system, which receives content in an initial format and reformats the received content into a first version having a first format and a second version having a second format, wherein the second version has a higher resolution than the first version (see column 4, lines 28-46; column 13, lines 14-20; and column 14, lines 13-22). As shown above, Loveman teaches that the format of this first version may comprise MPEG1. Moreover, Loveman discloses that the format of this second version may comprise MJPEG, such that it is of television broadcast quality (see column 6, lines 3-19). Loveman therefore does not explicitly disclose that the format of the second version comprises MPEG2, as is recited in each of claims 5, 30, and 55. Similarly, Clarin fails to teach that the format of the second version comprises MPEG2.

Like Loveman and Clarin, VideoUniversity discusses video editing, and more specifically, presents several video-editing systems (for example, see page 1). Regarding the claimed invention, VideoUniversity discloses that "while MJPEG is excellent for delivering fantastic video quality out to tape, it is a poor choice for multimedia" (see page 3). As described

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above, the content production system taught by Loveman is used to capture and edit multimedia content. Moreover, VideoUniversity describes MPEG2 based video compression and compares it with MJPEG, stating that "... the quality of [these] MPEG2 based cards is outstanding.

MPEG2 is a much more efficient compression than MJPEG, so you can maintain video quality at ½ the data rate!!" (see the bottom of page 3).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Loveman, Clarin, and VideoUniversity before him at the time the invention was made, to modify the multimedia capture and encoding system of Loveman and Clarin such that instead of reformatting the initial content into an MJPEG format, it reformats the content into an MPEG2 format, as is taught by VideoUniversity. It would have been advantageous to one of ordinary skill to utilize such a combination because MPEG2 provides similar quality to that of MJPEG at a lower data rate, as is taught by VideoUniversity.

Conclusion

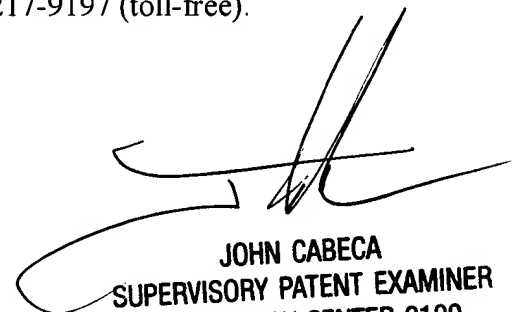
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb



JOHN CABECA
SUPERVISORY PATENT EXAMINER
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